

541,705

10 Nov 2004 10 Oct 2005

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
29 July 2004 (29.07.2004)

PCT

(10) International Publication Number
WO 2004/062501 A2

(51) International Patent Classification⁷: A61B 6/00, 6/03

(74) Common Representative: KONINKLIJKE PHILIPS ELECTRONICS N.V.; c/o LUNDIN, Thomas, M., 595 Miner Road, Cleveland, OH 44143 (US).

(21) International Application Number:

PCT/IB2003/006260

(22) International Filing Date:

19 December 2003 (19.12.2003)

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/438,962 9 January 2003 (09.01.2003) US

(84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

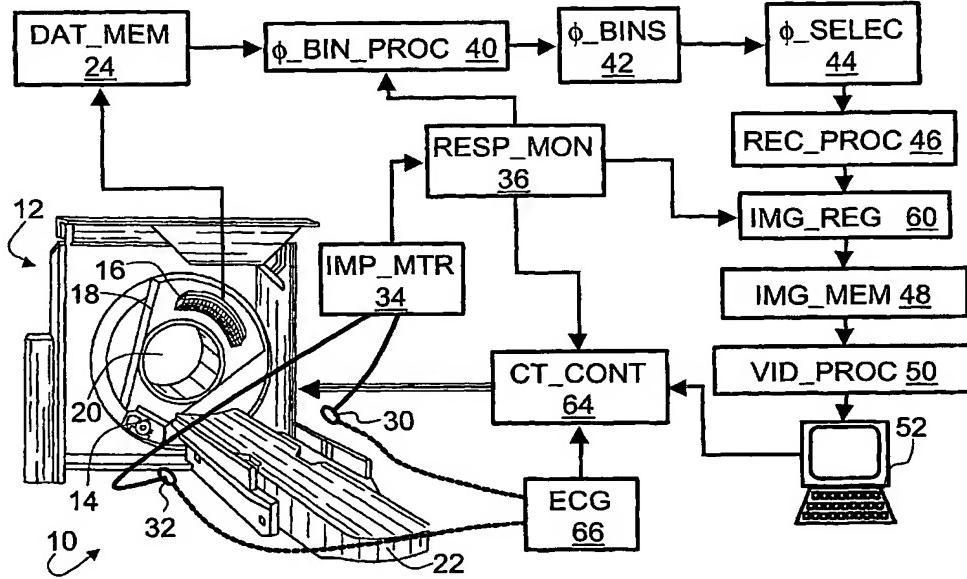
(71) Applicant (for all designated States except US): KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

Published:

— without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: RESPIRATION MONITOR FOR COMPUTED TOMOGRAPHY



(57) Abstract: A medical diagnostic imaging system (10) includes a diagnostic imaging scanner (12) that acquires imaging data of a medical imaging patient. A reconstruction processor (46) reconstructs at least a portion of the acquired imaging data into an image representation. A pair of electrodes (30, 32) contact a thoracic region of the patient. An electrical meter (34) measures electrical resistance R(t) or another time-varying electrical parameter (70) across the electrode pair (30, 32) during the acquiring of imaging data. A respiration monitor (36) extracts a time-varying respiration characteristic (90, 98, 110, 120) from the measured time-varying electrical parameter (70) to indicate respiratory cycle phase.

WO 2004/062501 A2



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.